

REMARKS

Claims 1, 5-20, 22-34, 47-50, and 52-56 are pending. Claims 11-19, 23-24, and 30-34 are allowed. Claims 1, 5-7, 20, 22, 25-29, 47-50, and 52-56 are rejected under 35 U.S.C. § 103(a). Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claim 47 is currently amended.

Independent claims 1, 20, 25, and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jalali et al. (U.S. Pat. No. 5,828,662) in view of Dent et al. (U.S. Pat. No. 5,353,352). Independent claims 1 and 20 recite “selecting one of a plurality of orthogonal codes for the preamble; generating a spread code using the selected orthogonal code repeated a selected number of repetitions; multiplying the spread code by a scrambling code associated with the base station, wherein the spread code has a length equal to a length of the scrambling code.”

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicants respectfully submit that the cited references fail to meet all three criteria for the following reasons.

First, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. “The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and

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the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

Here, there is no suggestion to combine the teaching of Jalali et al. with the teaching of Dent et al. to produce the present invention. Jalali et al. disclose a method of reducing a number of receivers at a base station. This reduction is accomplished by assigning each mobile terminal an individual time slot in for transmitting a synchronization message to the base station. (Abstract). The disclosure of Dent et al. is directed to reduction of cross-correlation of interfering signals in wireless communications. Dent et al. teach “The goal of minimizing errors due to interference from overlapping signals means that the interference signals should not transform to generate one or more large correlations that could be mistaken for the desired signal to be decoded. Rather, the interference signals should transform such that they are evenly spread, i.e. have the same magnitude, over all correlations.” (col. 9, lines 49-55). Thus, Jalali et al. and Dent et al. are directed to completely different purposes. Likewise, their respective solutions are directed to completely different problems. Jalali et al. teach simplification of base station circuitry during synchronization with mobile units. (Abstract). Dent et al. are concerned with producing a flat Walsh spectrum for N codewords in a Walsh-Hadamard code set. (col. 9, line 55 through coll. 10, line 7). One of ordinary skill in the art at the time of the present invention would not think to combine Jalali et al. with Dent et al. to produce the present invention apart from improper hindsight in view of the instant specification.

Second, there must be a reasonable expectation of success. Applicants cannot imagine and Examiner has not suggested how any combination of Jalali et al. and Dent et al. might produce good resolution of coded preambles transmitted from different distances and at significant velocities as taught by the present invention. (page 9, lines 2-5). Neither reference even suggests such a problem. Thus, one of ordinary skill in the art at the time of the invention would not consider any combination of Jalali et al. and Dent et al. would produce a

corresponding solution. There could be no reasonable expectation of success apart from improper hindsight in view of the instant specification.

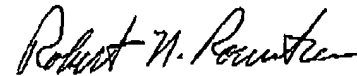
Finally, the combined references must teach or suggest all the claim limitations. Examiner admits Jalali et al. do not disclose that “the spread code has a length equal to a length of the scrambling code.” (Office Action 3/7/06, page 3, last paragraph). Examiner relies on the disclosure of Dent et al. for this limitation and cites column 10, lines 1-7. Therein, Dent et al. disclose “The scrambling masks to be constructed have the same length as the orthogonal codewords to which they are modulo-2 added.” But the orthogonal codewords of Dent et al. are not a “selected orthogonal code repeated a selected number of repetitions” as required by claims 1 and 20. They are a set of individual Walsh-Hadamard codewords, each having the same length as the scrambling mask. This is clear from the disclosure at column 10, lines 3-7. Dent et al. specifically state that the scrambling mask combined with the individual Walsh-Hadamard codewords result “forms a coset of the original Walsh-Hadamard code set (i.e. another code set).” Thus, for all the foregoing reasons, applicants respectfully submit that claims 1 and 20 and their respective depending claims are patentable under 35 U.S.C. § 103(a).

Independent claims 25 and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jalali et al. (U.S. Pat. No. 5,828,662) in view of Dent et al. (U.S. Pat. No. 5,353,352). Independent claim 25 recites “selecting a first code from a plurality of orthogonal codes; **repeating the first code a plurality of times to produce a spread code having a predetermined length; multiplying the spread code by a second code having the predetermined length; transmitting the preamble to a remote unit.**” Independent claim 47 recites “receiving a first number of repeated groups of signals having a second number of signals in each group from a received signal having a predetermined length, the received signal comprising a scrambling code having the predetermined length; **correlating the first number of repeated groups of signals with a code having the second number of signals, the code corresponding to the remote transmitter; and acknowledging the preamble to the remote transmitter to establish communications.**” (emphasis added).

Applicants reiterate that Examiner's proposed combination of Jalali et al. and Dent et al. is improper. Moreover, applicants respectfully submit that the foregoing emphasized limitations of independent claims 25 and 47 are notably absent from any combination of Jalali et al. and Dent et al. as previously discussed with regard to claims 1 and 20. Thus, applicants further submit that claims 25 and 47 and their respective depending claims are patentable under 35 U.S.C. § 103(a).

In view of the foregoing, applicants respectfully request reconsideration and allowance of claims 1, 5-7, 20, 22, 25-29, 47-50, and 52-56. If the Examiner finds any issue that is unresolved, please call applicants' attorney by dialing the telephone number printed below.

Respectfully submitted,



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